

SUMMARY

The present dissertation *Integrated Science Education and History of Science in Chemistry Education* is aimed at the problem of integrating scientific subjects by means of natural history.

The thesis contains research concerned with integrating science education in its various forms and its analysis from the point of valid curricular documents. Results of a questionnaire on intersubject integration distributed among grammar school chemistry teachers are presented in the thesis. Further on, an approach to the integration by means of natural history is presented. Didactic materials were created on this topic: worksheets and didactic tests in Adobe Flash. Worksheets were attested in grammar school teaching and results of this attestation are included. The thesis also includes results of two projects aimed at the topic of natural history. These projects are: *History of Natural Sciences in High School Teacher Education* (Fund for the development of higher education in the Czech Republic, 2011) and a course called *Alchymistic Prague* (Developmental project of the Ministry of Education, 2011: Chemistry year - Chemistry for all).